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November 29, 2004

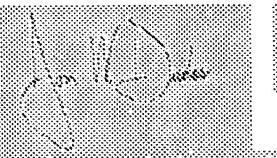
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APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A
FILING DATE.

APPLICATION NUMBER: 60/518,218

FILING DATE: November 07, 2003

RELATED PCT APPLICATION NUMBER: PCT/US04/36275

Certified by



Jon W Dudas

Acting Under Secretary of Commerce
for Intellectual Property
and Acting Director of the U.S.
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PTO/SB/16 (02-01)

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

U.S.PTO
17302 60/518218
110703

Express Mail Label No. EV413351752US

INVENTOR(S)

Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Bret David	Hawkins	Brownsburg, Indiana
James Duane	Tenbarge	Fishers, Indiana

Additional inventors are being named on the _____ separately numbered sheets attached hereto

TITLE OF THE INVENTION (280 characters max)

AUTO DISPLAY OF CHANNEL BANNER ON A PROGRAM CHANGE

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Customer Number



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OR

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Firm or
Individual Name

JOSEPH S. TRIPOLI, THOMSON LICENSING INC.

Address

PATENT OPERATIONS.

Address

P. O. BOX 5312

City

PRINCETON

State

NJ

ZIP 08543-5312

Country

USA

Telephone

609-734-6834

Fax 609-734-6888

ENCLOSED APPLICATION PARTS (check all that apply)

Specification Number of Pages

3

CD(s), Number

Drawing(s) Number of Sheets

3

Other (specify)

Application Data Sheet. See 37 CFR 1.76

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)

Applicant claims small entity status. See 37 CFR 1.27.

A check or money order is enclosed to cover the filing fees

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AMOUNT (\$)

The Commissioner is hereby authorized to charge filing
fees or credit any overpayment to Deposit Account Number:

07-0832

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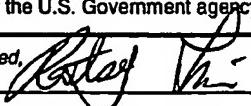
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The invention was made by an agency of the United States Government or under a contract with an agency of
the United States Government.

No.

Yes, the name of the U.S. Government agency and the Government contract number are: _____.

Respectfully submitted,

SIGNATURE 

TYPED or PRINTED NAME

Reitseng Lin

Date

11/7/03

REGISTRATION NO.

42,804

(if appropriate)

Docket Number:

PU030298

TELEPHONE 609 734-6813

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 160)

Complete if Known	
Application Number	
Filing Date	
First Named Inventor	Bret David Hawkins
Examiner Name	
Group / Art Unit	
Attorney Docket No.	PU030298

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)																																																																																																																																					
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ADDITIONAL FEES <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> </tr> </thead> <tbody> <tr> <td>Fee Code</td> <td>Fee Code</td> </tr> <tr> <td>1051</td> <td>130</td> </tr> <tr> <td>1052</td> <td>50</td> </tr> <tr> <td>1053</td> <td>130</td> </tr> <tr> <td>1812</td> <td>2,520</td> </tr> <tr> <td>1804</td> <td>920*</td> </tr> <tr> <td>1805</td> <td>1,840*</td> </tr> <tr> <td>1251</td> <td>110</td> </tr> <tr> <td>1252</td> <td>420</td> </tr> <tr> <td>1253</td> <td>950</td> </tr> <tr> <td>1254</td> <td>1,480</td> </tr> <tr> <td>1255</td> <td>2,010</td> </tr> <tr> <td>1401</td> <td>330</td> </tr> <tr> <td>1402</td> <td>330</td> </tr> <tr> <td>1403</td> <td>290</td> </tr> <tr> <td>1451</td> <td>1,510</td> </tr> <tr> <td>1452</td> <td>110</td> </tr> <tr> <td>1453</td> <td>1,330</td> </tr> <tr> <td>1501</td> <td>1,330</td> </tr> <tr> <td>1502</td> <td>480</td> </tr> <tr> <td>1503</td> <td>640</td> </tr> <tr> <td>1460</td> <td>130</td> </tr> <tr> <td>1807</td> <td>50</td> </tr> <tr> <td>1806</td> <td>180</td> </tr> <tr> <td>8021</td> <td>40</td> </tr> <tr> <td>1809</td> <td>770</td> </tr> <tr> <td>1810</td> <td>770</td> </tr> <tr> <td>1801</td> <td>770</td> </tr> <tr> <td>1802</td> <td>900</td> </tr> <tr> <td colspan="2">Fee Description</td> </tr> <tr> <td colspan="2">Surcharge - late filing fee or oath</td> </tr> <tr> <td colspan="2">Surcharge - late provisional filing fee or cover sheet.</td> </tr> <tr> <td colspan="2">Non-English specification</td> </tr> <tr> <td colspan="2">For filing a request for reexamination</td> </tr> <tr> <td colspan="2">Requesting publication of SIR prior to Examiner action</td> </tr> <tr> <td colspan="2">Requesting publication of SIR after Examiner action</td> </tr> <tr> <td colspan="2">Extension for reply within first month</td> </tr> <tr> <td colspan="2">Extension for reply within second month</td> </tr> <tr> <td colspan="2">Extension for reply within third month</td> </tr> <tr> <td colspan="2">Extension for reply within fourth month</td> </tr> <tr> <td colspan="2">Extension for reply within fifth month</td> </tr> <tr> <td colspan="2">Notice of Appeal</td> </tr> <tr> <td colspan="2">Filing a brief in support of an appeal</td> </tr> <tr> <td colspan="2">Request for oral hearing</td> </tr> <tr> <td colspan="2">Petition to institute a public use proceeding</td> </tr> <tr> <td colspan="2">Petition to revive – unavoidable</td> </tr> <tr> <td colspan="2">Petition to revive – unintentional</td> </tr> <tr> <td colspan="2">Utility issue fee (or reissue)</td> </tr> <tr> <td colspan="2">Design issue fee</td> </tr> <tr> <td colspan="2">Plant issue fee</td> </tr> <tr> <td colspan="2">Petitions to the Commissioner</td> </tr> <tr> <td colspan="2">Processing fee under 37 CFR 1.17 (q)</td> </tr> <tr> <td colspan="2">Submission of Information Disclosure Stmt</td> </tr> <tr> <td colspan="2">Recording each patent assignment per property (times number of properties)</td> </tr> <tr> <td colspan="2">Filing a submission after final rejection (37 CFR § 1.129(a))</td> </tr> <tr> <td colspan="2">For each additional invention to be examined (37 CFR § 1.129(b))</td> </tr> <tr> <td colspan="2">Request for Continued Examination (RCE)</td> </tr> <tr> <td colspan="2">Request for expedited examination of a design application</td> </tr> <tr> <td colspan="4">Other fee (specify) _____</td> </tr> <tr> <td colspan="4">*Reduced by Basic Filing Fee Paid</td> </tr> <tr> <td colspan="4">SUBTOTAL (3) (\$ 0)</td> </tr> </tbody> </table>				Large Entity	Small Entity	Fee Code	Fee Code	1051	130	1052	50	1053	130	1812	2,520	1804	920*	1805	1,840*	1251	110	1252	420	1253	950	1254	1,480	1255	2,010	1401	330	1402	330	1403	290	1451	1,510	1452	110	1453	1,330	1501	1,330	1502	480	1503	640	1460	130	1807	50	1806	180	8021	40	1809	770	1810	770	1801	770	1802	900	Fee Description		Surcharge - late filing fee or oath		Surcharge - late provisional filing fee or cover sheet.		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Name (Print/Type)	Reitseng Lin	Registration No. Attorney/Agent)	42,804	Telephone	609-734-6813
Signature			Date	November 7, 2003	

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AUTO DISPLAY OF CHANNEL BANNER ON A PROGRAM CHANGE

Technical Field of Invention

5 This invention relates to the field of television for automatically displaying information about the next program before the ending of the current program.

Background Art

When a current program is about to end, the user cannot tell what the
10 next program in the same channel is without manually pressing the INFO key on the remote to bring up the program information such as channel banner or without manually entering a program guide to get the title information.

Disclosure of Invention

According to the principles of the invention, when a television
15 apparatus detects that a current program is ending in a predetermined time interval, the television apparatus automatically displays the program information such as channel banner or title of the next program.

Furthermore, if a new program is received before the end of the current program, the television apparatus updates the displayed program information
20 according to the information included in the newly received program guide.

Brief Description of Drawings

FIG. 1 is an illustrative flow chart showing how a television apparatus displays the program information for the next program when the current program is about to end.

25 FIGs. 2 and 3 each show an example of a television apparatus suitable for implementing the process shown in FIG. 1.

Detailed Description

A television apparatus, such as a television made by Thomson Inc.,
Indianapolis, Indiana, can receive guide data from Gemstar or PSIP (Program
30 and System Information Protocol) tables on ATSC (Advanced Television Systems Committee) streams. ATSC is a high definition television standards body. For illustration purposes, the PSIP data is used in the following discussion, but something similar could be done with data from Gemstar. Essentially there is data in the PSIP EIT (event information tables) which

includes start and end times of a program or time information necessary for deriving the start and end times of the program. Using this information, a television apparatus can detect that a current program is about to end in a predetermined time and pop the program information such channel banner

5 and program title of the next program. Additionally, when the television apparatus receives an updated PSIP guide before the end of the current program, the television apparatus may display the new guide information to the user automatically. By automatically displaying this information, the user is no longer required to manually bring up the channel banner or guide to see

10 what the next program is.

FIG. 1 illustrates the process of displaying the program information, illustratively the channel banner, of the next program before the current program ends.

FIGs. 2 and 3 each show an embodiment of a television apparatus that

15 can be used to implement the process described in FIG. 1.

While this invention has been described with regard to a few presently preferred embodiments, those skilled in this art will readily appreciate that many alternative modes and embodiments can be carried out without departing from the spirit and scope of this invention.

CLAIMS

What is claimed is:

1. A method for displaying information of a next program by a television apparatus before the end of a currently showing program, the method comprising the steps of:
 - acquiring by the television apparatus end time of the currently showing program from a program guide;
 - determining by the television apparatus using the end time whether the currently showing program is ending in a predetermined time; and
 - if the currently showing program is ending within the predetermined time, the television apparatus displaying information of the next program.
2. A television apparatus comprising:
 - storage for storing program information for each program, including time information for each program; and
 - a controller for determining whether a currently showing program is ending in a predetermined time using the time information, wherein if the currently showing program is ending in the predetermined time, the controller displays information of a next program.

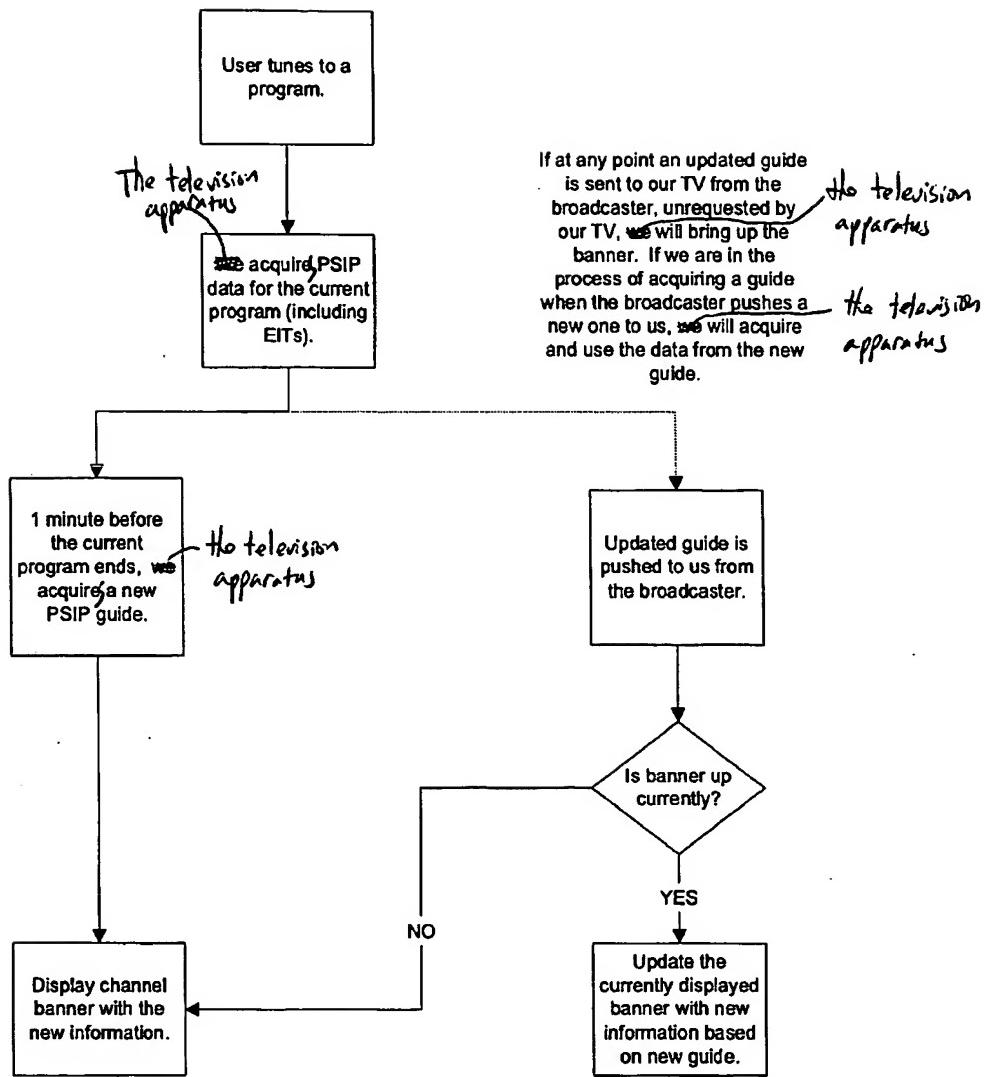
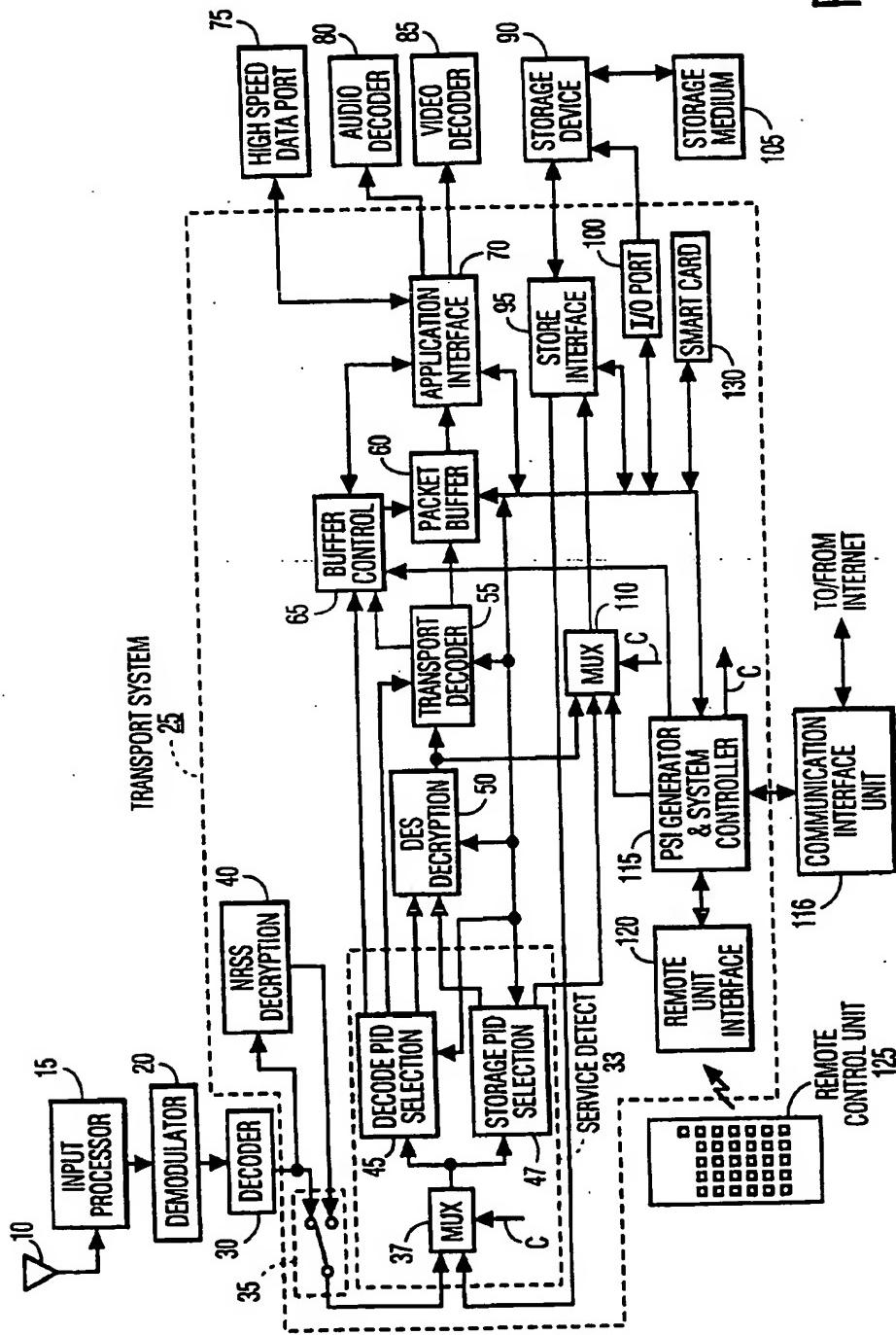


FIG. 1

2/12

FIG. 2



3/12

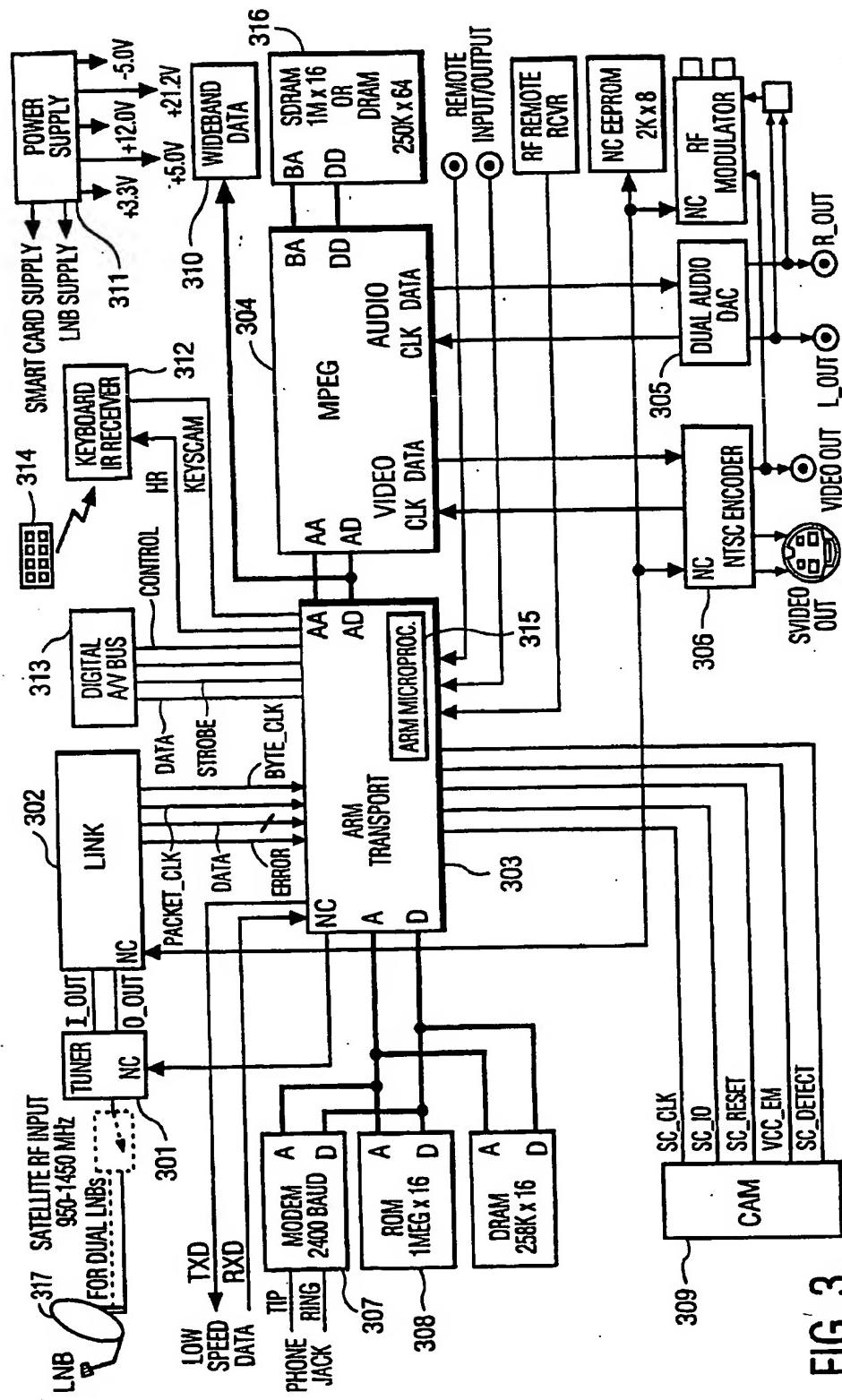


FIG. 3

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/US04/036275

International filing date: 01 November 2004 (01.11.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/518,218
Filing date: 07 November 2003 (07.11.2003)

Date of receipt at the International Bureau: 06 December 2004 (06.12.2004)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
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